UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

Enterprise Energy Efficiency (3E)

IQC Contract # EPP-I-00-03-00004-00
Task Order # 12

USAID 3E PILOT PROJECTS FLYER

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December 11, 2013

Implemented by:
Advanced Engineering Associates International, Inc. (AEAI)

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FROM THE AMERICAN PEOPLE

The thirteen Mayors of Tuzla Canton municipalities and the Tuzla Canton Prime Minister signed an Energy Charter on June 19, 2013

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To actively promote energy efficiency, renewable energy sources and energy management in public buildings and communal systems, thirteen Municipality Mayors of Tuzla Canton and the Tuzla Canton Prime Minister signed an Energy Charter, in which they agreed to direct their efforts to a sustainable energy future in their municipalities.

Within the "Energy Efficiency Year in Tuzla Canton," USAID 3E will focus its efforts on two fronts: one is technical assistance to the Municipalities in establishing an energy management structure, and the other is the educational and public awareness effort aimed at the general public.

Energy management is a process of continuous monitoring of energy consumption in order to detect and correct excessive energy consumption, all of which results in a decrease of the costs spent on energy. The first goal was to make an energy consumption baseline for the Municipalities: 3E's findings are that a total of almost 5 million KM was spent on energy in the public sector in Tuzla Canton in 2012. This is a significant amount, which confirms that there is a lot of room for savings through the implementation of energy efficiency measures.

The USAID 3E project will further support the Municipalities in conducting a number of energy audits of buildings and preparation of feasibility studies, which will be used as actual examples for workshops and trainings for municipal staff. This will go along with the case studies based on the 17 pilot projects USAID 3E has implemented in BiH to provide a wealth of knowledge and local experience to supplement the workshops.

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Pilot project partners: **United nations Development Programme (UNDP), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Suisse Caritas, Hilfswerk Austria,** relevant ministries in FBiH and RS, cities and municipalities in BiH, local companies

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PILOT PROJECTS IN BiH

The centerpiece of the USAID 3E Project is the implementation of Pilot Projects throughout Bosnia and Herzegovina. This component has used local companies to carry out the works, and has held trainings and seminars on energy efficiency in the region of the pilot projects.

"BESIDES FINANCIAL SAVINGS, ENERGY EFFICIENCY MEASURES SIGNIFICANTLY IMPROVE THE COMFORT OF LIVING IN BUILDINGS"

Mature, proven energy efficiency technologies have been implemented in BiH with payback periods of less than five years. The consumer can recover the savings in lower bills for heating, electricity and water and continues to reap the benefits after payback.

3E has implemented energy efficiency measures related to:

1. **Improvement of the building envelope**
2. **Improvement of the efficiency of the heating/cooling sources, distribution system, and domestic hot water**
3. **Improvement of building mechanical heating ventilation and air conditioning (HVAC) equipment**
4. **Improvement of lighting**
5. **Installation of renewable energy sources**
6. **Introduction of Energy management schemes – the "Intelligent building concept"**


MECHANICAL ENGINEERING FACULTY SARAJEVO

560.000 KM
TOTAL PROJECT VALUE

Implemented Energy Efficiency measures:
- Upgrade of the heating system
- Installation of a new boiler
- Replacement of windows
- Insulation of the building
- Installation of a system for remote reading of energy consumption

Energy savings	Costs reduced	Return period
50% ili 412 MWh	56.000 KM	10 years


20 HOUSES IN SARAJEVO AND TUZLA

182.000 KM
TOTAL PROJECT VALUE

Implemented Energy Efficiency measures:
- Thermal insulation 10 cm

Energy savings	Costs reduced	Return period
45% ili 550MWh	16.000 KM	8 years


SPORTS HALL IN LIVNO

326.000 KM
TOTAL PROJECT VALUE

Implemented Energy Efficiency measures:
- Installation of district heating supply line
- Installation of a heating substation in the Sports Hall building
- Overhauling of the existing heating and ventilation system
- Installation of solar thermal panels for heating domestic hot water
- Replacement of windows and doors
- Replacement of a part of the roof covering
- Installation of Monitoring and Verification system
- Thermal Insulation of the facade

Energy savings	Costs reduced	Return period
40% ili 80MWh	29.500 KM	11 years


LED STREET LIGHTING IN TREBINJE

110.000 KM
TOTAL PROJECT VALUE

Implemented Energy Efficiency measures:
- Replacement of the existing mercury light bulbs with LED light bulbs

Energy savings	Costs reduced	Return period
70% ili 158 MWh	28.000 KM	4 years


HIGH SCHOOL IN MOSTAR

56.000 KM
TOTAL PROJECT VALUE

Implemented Energy Efficiency measures:
- Reconstruction of the heating distribution system (enabling zonal control heating
- Installation of a system for remote reading of energy consumption
- Replacement of windows
- Technical improvement of the heating system in the school gymnasium

Energy savings	Costs reduced	Return period
20% ili 50 MWh	9.800 KM	6 years


SOS CHILDRENS VILLAGE GRAČANICA

28.000 KM
TOTAL PROJECT VALUE

Implemented Energy Efficiency measures:
- Windows repair
- Installation of solar thermal panels for heating domestic hot water
- Installation of a system for remote reading of energy consumption

Energy savings	Costs reduced	Return period
25% ili 25 MWh	3.600 KM	8 years